REMARKS

Claims 11 to 20 are now pending in the present application. Applicants respectfully request reconsideration of the present application in view of the following remarks.

Applicants note with appreciation the acknowledgment of the claim for foreign priority and the indication that all certified copies of the priority documents have been received.

Applicants thank the Examiner for considering the previously filed Information Disclosure Statement, PTO-1449 paper and cited reference(s).

The drawings in figures 1, 2, and 4 were objected to. The Office Action has requested Applicants to certify that the "FF" labels were originally presented in International Patent Application No. PCT/DE03/04177. As an initial matter, Applicants respectfully note that such certification is not required in this instance since the "FF" labels are clearly supported by the specification. Notwithstanding the above, Applicants hereby certify that the labels were originally presented in International Patent Application No. PCT/DE03/04177, and, for the Examiner's convenience, have included a copy of its published figures 1, 2, and 4.

The drawings were objected to with respect to the feature of a number of shift registers. While Applicants do not necessarily agree with the merits of this objection, to facilitate matters, claims 11 and 20 have been amended herein without prejudice to obviate this objection.

Withdrawal of the objections to the drawings is therefore respectfully requested.

The Office Action states that the amendments to the specification presented in the Preliminary Amendment dated June 17, 2005 have not been entered because the amendments allegedly add new matter that was not previously presented in the original application. It is respectfully submitted that the amendments to the specification do not add new matter and are fully supported by the original application. The amendments are corrections of typographical errors and minor clarifications that are fully supported by the specification and the drawings as originally filed.

The Office Action apparently intends to refer to the text added to clarify the discussed "shift registers" as assertedly adding new matter. However, the shift registers are described as "SHR FF" in figures 1, 2, and 4 in the drawings of the original specification. One skilled in the art would understand that "SHR FF" stands for Shift Register Flip-Flop, particularly in light of that which is stated at page 5, lines 27 to 29 and which was included in the application as originally filed, *i.e.*, "[t]he code generator may thus be a parity generator where i = 1, in this case one additional flip-flop being required." Furthermore, the specification as originally filed refers to the elements of the figures labeled "SHR FF" as "shift register." *See,*

e.g., Original Specification, page 4, line 7. Furthermore, one skilled in the art would understand the label "SHR FF," used as legend for an element described with respect to a shift register, as referring to a shift register flip-flop.

Accordingly, the amendments to the specification presented in the Preliminary Amendment dated June 17, 2005 merely clarify and correct typographical errors and do not add new matter. For example, it would be obvious to one skilled in the art that the reference to shift register in the original specification at page 4, line 7 is actually a reference to a shift register flip-flop since referenced component 408 is clearly labeled as "SHR FF" in figure 4. Accordingly the amendment by the substitute specification to this section merely clarifies without adding new matter.

Entry of the amendments to the specification presented in the Preliminary Amendment dated June 17, 2005 is therefore respectfully requested.

Claims 11 to 15 and 20 were objected to for alleged informalities. While Applicants do not necessarily agree with the merits of this objection, claims 11 to 15 and 20 have been amended herein without prejudice to obviate the present objection. Withdrawal of this objection is therefore respectfully requested.

Claims 11 and 20 were rejected under 35 U.S.C. 112, ¶1 as assertedly failing to comply with the written description requirement. The Office Action alleges that the feature of "a predetermined number of bit positions" is not supported in the specification. However, the "predetermined number" is discussed throughout the specification. For example, the first line of the abstract specifies that "a *predefined number* of shift registers being provided, to which input data to be tested is applied bit-by-bit and in parallel as successive data words and which serially shift the input data forward in a predefinable cycle." It is noted that one skilled in the art would understand that the terms "predefined" and "predetermined" may be used interchangeably.

Withdrawal of this written description rejection is therefore respectfully requested.

Claims 11 and 20 were rejected under 35 U.S.C. 112, ¶2 as assertedly indefinite. In this regard, the Office Action acknowledges that the data can be loaded in parallel but does not recognize that data can be serially loaded as claimed.

However, claims recite the invention. Their purpose is not to explain how the invention works. That role is left to the specification. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1558 (Fed. Cir. 1983). Thus, the claims need not at all recite how a claimed device or method works. Therefore, that the claim itself does not explain how the input data to be tested is applied bit-by-bit and in parallel does not render the claim indefinite.

Further, the specification provides support for these features. The specification states that "input data to be tested is applied ***bit-by-bit*** and in ***parallel*** as successive data words." Specification, page 2, lines 7 to 14. Thus, the device is configured to be able to accept input data "bit by bit" as well as loaded in parallel. Further, the Drawings, e.g., figure 3, describes an example embodiment in which data is input bit-by-bit per input, where each input receives one bit of a data word, and where the inputs receive different bits of a single data word in parallel.

In view of all of the foregoing, withdrawal of this indefiniteness rejection is respectfully requested.

Claims 11, 12, and 20 were rejected under 35 U.S.C. 102(b) as anticipated by U.S. Patent No. 6,199,184 (the "Sim" reference).

To reject a claim under 35 U.S.C. § 102(b), the Office must demonstrate that each and every claim feature is identically described or contained in a single prior art reference. (*See Scripps Clinic & Research Foundation v. Genentech, Inc.*, 18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991)). Still further, not only must each of the claim features be identically described, an anticipatory reference must also enable a person having ordinary skill in the art to practice the claimed invention, namely the claimed subject matter of the claims, as discussed herein. (*See Akzo, N.V. v. U.S.I.T.C.*, 1 U.S.P.Q.2d 1241, 1245 (Fed. Cir. 1986)).

As further regards the anticipation rejections, to the extent that the Office Action may be relying on the inherency doctrine, it is respectfully submitted that to rely on inherency, the Office must provide a "basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristics *necessarily* flows from the teachings of the applied art." (*See* M.P.E.P. § 2112; emphasis in original; and *see Ex parte Levy*, 17 U.S.P.Q.2d 1461, 1464 (Bd. Pat. App. & Int'f. 1990)). Thus, the M.P.E.P. and the case law make clear that simply because a certain result or characteristic may occur in the prior art does not establish the inherency of that result or characteristic. Accordingly, it is respectfully submitted that any anticipation rejection premised on the inherency doctrine is not sustainable absent the foregoing conditions.

Claim 11 relates to a device for forming a signature. Claim 11, as presented, provides a shift register having a number of bit position memory devices to which input data to be tested is applied and a code generator which generates at least one additional bit position in at least one additional bit position memory device of the shift register from each applied data word in the signature.

The Office Action refers to the first and second MISRs 42-1 and 42-2 shown in figure 4 of the "Sim" reference as assertedly disclosing the shift register and the code generator. However, the MISRs 42-1 and 42-2 are two distinct shift registers coupled in series. The MISR 42-2 does not, for example, generate a bit position in at least one additional bit position memory device of the MISR 42-1. Therefore, the MISR 42-2 (referred to by the Office Action as assertedly disclosing the code generator) does not identically disclose, or even suggest, a component which "generates at least one additional bit position[, *i.e.*, in addition to the data to be tested,] in at least one additional bit position memory device of the shift register [to which the data to be tested is applied]," as provided for in the context of claim 11.

For at least these reasons, the "Sim" reference does not identically disclose, or even suggest, each feature of claim 11, so that the "Sim" reference does not anticipate claim 11 or any of its dependent claims, e.g., claim 12.

Claim 20, as presented, includes subject matter analogous to that of claim 11, so that the "Sim" reference does not anticipate claim 20 for at least essentially the same reasons set forth above in support of the patentability of claim 11.

Withdrawal of this anticipation rejection is therefore respectfully requested.

Claim 13 was rejected under 35 U.S.C. 103(a) as obvious over the "Sim" reference.

To reject a claim under 35 U.S.C. § 103(a), the Office bears the initial burden of presenting a *prima facie* case of obviousness. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). To establish *prima facie* obviousness, three criteria must be satisfied. First, there must be some suggestion or motivation to modify or combine reference teachings. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). This teaching or suggestion to make the claimed combination must be found in the prior art and not based on the application disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991). Second, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 U.S.P.Q. 375 (Fed. Cir. 1986). Third, the prior art reference(s) must teach or suggest all of the claim features. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974).

Claim 13 depends from claim 11 and therefore includes all of the features of claim 11. As set forth in the patentability of claim 11, the "Sim" reference does not disclose or suggest the claim feature of a code generator which generates at least one additional bit position in at least one additional bit position memory device of the shift register from each applied data word in the signature, as provided for in the context of claim 11 from which claim 13 depends.

For at least these reasons, the "Sim" reference does not disclose or suggest each feature of claim 13, so that claim 13 is allowable.

Claims 14 to 19 were rejected under 35 U.S.C. 103(a) as obvious over the "Sim" reference in view of Biswas, "Design of UED-AUED Codes from Berger's AUED Code," IEEE VLSI Design, pages 364-369 (the "Biswas" reference).

Claims 14 to 19 ultimately depend from claim 11 and therefore include all of the features of claim 11. Accordingly, the combination of the "Sim" and "Biswas" references does not render unpatentable these dependent claims for at least the same reasons set forth above in support of the patentability of claim 11, since the secondary "Biswas" reference does not correct the critical deficiencies of the "Sim" reference noted above in support of the patentability of claim 11.

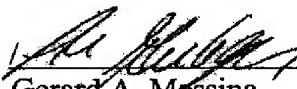Withdrawal of this obviousness rejection is therefore respectfully requested.

CONCLUSION

In view of the foregoing, it is respectfully submitted that all of claims 11 to 20 are allowable. It is therefore respectfully requested that the objections and rejections be withdrawn. Prompt reconsideration and allowance of the present application are therefore respectfully requested.

Respectfully submitted,

KENYON & KENYON LLP

Dated: December 18, 2007   By: /Gerard A. Messina/ (Reg. No. 59,210) for:
Gerard A. Messina
(Reg. No. 35,952)

One Broadway
New York, NY 10004
(212) 425-7200
CUSTOMER NO. 26646